

Underage Drinking in Arizona Data Findings and Analysis

Research Conducted by Pima Prevention Partnership



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Executive Summary

The Arizona Underage Drinking Prevention Committee (UAD Committee) contracted with Pima Prevention Partnership (PPP) in August 2006 to provide research and evaluation services as part of the UAD Committee's Underage Drinking Social Norms Strategy. Phase I of this work included the conduct of focus groups with parents as well as a meta-analysis of underage drinking data that included statewide and local surveys, and law enforcement citation records.

The main findings and resulting recommendations from the meta-analysis and focus groups are highlighted below, followed by a more thorough presentation of the research methodology, results, and limitations.

Key findings

Youth get the majority of their alcohol at parties or at an underage friend's house

- > 77% of youth surveyed say they get their alcohol from other underage friends or at parties with these friends (SADD, 2006).
- ➤ 68% of youth surveyed say they drink alcohol with underage friends or at parties with these friends (SADD, 2006).
- ➤ Parents report that the 2nd and 3rd most common way that youth get access to alcohol is from friends and at parties, respectively (GYC Parent Focus Groups, 2006)
- ➤ 62% of Arizona adults believe that youth get their alcohol from their friends (Adult Perception Survey, 2006).

Adult enablers provide alcohol to youth in a variety of settings

- ➤ Almost half of 1000 Arizona adults surveyed (47%) believe it is okay for youth to drink alcohol under supervision of their parents or guardians (Adult Perception Survey, 2006).
- More than a third (35%) of 1000 Arizona adults surveyed report knowing an adult who has provided alcohol to a person under the age of 21 (Adult Perception Survey, 2006).
- Parents believe that the number one source for providing alcohol to youth come from the parents of youth in their own homes (GYC Focus Groups, 2006).
- Adults in the 18-34 year old age range have a statistically significant more permissive attitude toward underage drinking than do their older adult counterparts (Adult Perception Survey, 2006).

DUI Task Force activities on their own do not have a statistically significant impact on apprehending underage drinkers

- ➤ Overall, there is no statistical relationship between DUI Task Force activity alone and enforcement of DUI laws against underage persons (GOHS, 2006).
- ➤ January 2005 was the only month, over a 12-month period, in which there was some evidence of a relationship between DUI Task Force activity and enforcement of DUI laws against underage persons (GOHS, 2006).

➤ Statistically speaking, only 13% of all arrests for DUI (adult and youth) can be explained by the number of officers deployed in Task Force activities and the locations of these deployments (GOHS, 2006).

Resulting Recommendations

The State Underage Drinking Prevention Committee should fund and actively support a statewide media campaign targeting young adults.

- A statewide media campaign should be developed, aimed at adults aged 18-34, since this is the group most likely to condone underage drinking, provide alcohol to minors, and to oppose legislation aimed at reducing underage drinking.
- Media messages directed at parents should present clear strategies for preventing underage drinking and for communicating with youth about alcohol, address permissive and harm reduction parenting approaches, provide information on the impact of alcohol on youth development, and provide information on the legal consequences of providing alcohol to minors.

The State Underage Drinking Prevention Committee should actively support the expansion of state and local enforcement and educational activities targeting youth alcohol use.

- ➤ Strategies targeting youth access to alcohol (including Covert Underage Buyers, Shoulder Taps, Cops in Shops, social host laws, party dispersal enforcement, keg registration, as well as the educational and enforcement activities of the Phoenix Police Department Youth Alcohol Squad) should be intensified at the state level and expanded to more local communities.
- ➤ The State Underage Drinking Prevention Committee should support an increase in the number of enforcement officers within the Arizona Department of Liquor License and Control.

The State Underage Drinking Prevention Committee should actively support improvements to the statewide data collection on youth alcohol use and adult perceptions and behaviors related to youth alcohol use.

- ➤ Data collection protocols and survey instruments should be strengthened to improve the state's ability to track trends and to make data-driven decisions related to youth alcohol use.
- Additional data should be collected from the Department of Liquor License and Control and the Phoenix Police Department Youth Alcohol Squad to improve our understanding of how and why their efforts may be reducing youth alcohol use.
- ➤ An inventory should be created of all known youth alcohol reduction efforts being conducted at the state and community levels, to track trends and inform policy and practice.

Organization of this Report

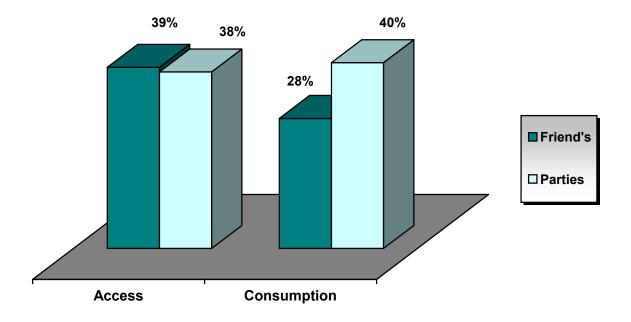
To provide the reader with an accessible document, this report follows in six sections, which present the most salient information first, followed by detailed descriptions on the data and methods upon which this information is based. The *Main Findings* section provides a brief summary of the most relevant findings of the report. The *Recommendations* section summarizes the recommendations developed from these findings and the *Background* section presents the reader with the context for this report. The *Limitations* section describes how the data and methods could be improved to provide more reliable and useful results in the future. The *Methodology* section describes the general characteristics of the research approach that was used, as well as a description of the population represented by the data. Within the *Results* section is a more detailed review of each of the data sets that were analyzed.

Main Findings

1. Youth get the majority of their alcohol at parties or at an underage friend's house

Both focus group and survey data reveal that Arizona youth are more likely to gain access to alcohol while at parties with their underage friends or while at another underage friend's home, than through any other means (Figure 1).

Figure 1: Arizona Youth Access to Alcohol (SADD Surveys, N=125)



During focus groups, most parents shared the belief that alcohol comes either from the home (whether parents knowingly provided it or not), or from older friends, siblings, and relatives. Many parents also thought that teens obtained alcohol at parties. A few respondents pointed out that youth obtain alcohol by asking adult strangers to purchase it for them, an activity known as a "shoulder tap." Other common perceptions were that youth obtain alcohol with false identification, in Mexico, on college campuses, and through theft.

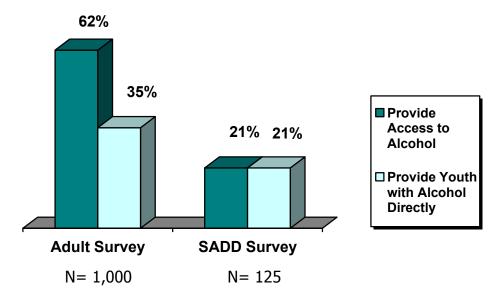
Table 1: Parent Perceptions of Where Youth Obtain Alcohol (N = 38)

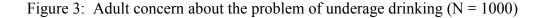
Rank	Source of Alcohol
1	Home
2	Older friends, siblings, relatives
3	Parties
4	Adult/Stranger buyers
5	False identification
6	Mexico
7	College campuses

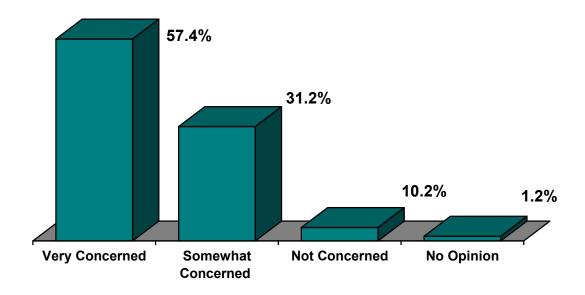
2. Adult enablers provide alcohol to youth in a variety of settings

A statewide sample of adults surveyed by telephone believed that many youth get their alcohol from "adult enablers" (Table 2), defined as adults who provide alcohol or access to alcohol to youth. This data is also consistent with youth self-report surveys from SADD, parent focus groups conducted by the Governor's Youth Commission (GYC), and national data from the Youth Risk Behavioral Surveillance Survey (YRBS) and the Center for Substance Abuse Prevention (CSAP) and Center for Substance Abuse Treatment (CSAT).

Figure 2: Adult Enabler Roles in Underage Drinking







Overall, Arizona adults (N=1000) surveyed by phone voiced a great deal of concern over the problem of underage drinking (Figure 3 above), but when split by age groups, the 18-34 year old group demonstrated a statistically significant increase in permissive attitudes toward underage drinking (Adult Perception Survey, 2006) as shown in Table 2, below.

Table 2: Support for Underage Drinking Reduction Activities Split by Age

Underage Drinking Reduction Activities	18-34 years olds	35 years and older
Strengthen penalties for persons under 21 years	Do Not Support	Do Support
purchasing alcohol		
Create policies that focus on adults who provide	Do Not Support	Do Support
alcohol to persons under 21 years of age		
Create a traceable registration number policy	Do Not Support	Do Support
for beer kegs		

3. Findings in comparison to other studies

Results from this study are generally consistent with findings from other recent studies of this type. Nationally, 88% of adolescents perceive alcohol to be available to them and 28.7% of adolescents reported having easy access to alcohol in the home (M H Swahn, B J Hammig, and R M Ikeda, 2002). An annual average of 4.2 million persons aged 16 to 20 reported driving under the influence of alcohol or illegal drugs during the past year. About 169,000 of these persons (4%) reported that they had been arrested and booked for DUI/DWI involving alcohol or drugs in the past year. (SAMHSA Office of Applied Studies, 2004).

Recommendations

1. The State Underage Drinking Prevention Committee should fund and actively support a statewide media campaign targeting young adults.

Consistent with national findings, most adults in Arizona both express concern about youth drinking and support public policy actions to reduce youth access to alcohol. However, the analysis in this report demonstrate that young adults aged 18-34 differ from older adults in that they are far less concerned about underage drinking and not in favor of policy efforts to reduce youth access to alcohol. Furthermore, data reviewed in this report indicate that youth obtain alcohol primarily from older friends, siblings, and other adults who are likely to be in the 18-34 age range. Subsequently, it is the recommendation of PPP that a statewide media campaign be developed; using rigorous formative research on effective messages, and aimed at adults aged 18-34, since this is the group most likely to provide alcohol to minors and to oppose legislation aimed at reducing underage drinking.

The analysis in this report demonstrates that, while concerned about underage drinking, most parents employ a harm reduction approach regarding youth alcohol use rather than a zero-tolerance approach. In other words, rather than telling their children not to drink alcohol, most parents try to limit the potential harm of youth alcohol consumption by allowing youth to drink alcohol at home under adult supervision or telling them not to drink and drive. In addition, a large proportion of youth reported that their parents do not talk to them about underage drinking. Media messages directed at parents should present clear strategies for preventing underage drinking and for communicating with youth about alcohol, address permissive and harm reduction parenting approaches, provide information on the impact of alcohol on youth development, and provide information on the legal consequences of providing alcohol to minors.

2. The State Underage Drinking Prevention Committee should actively support the expansion of state and local enforcement and educational activities targeting youth alcohol use.

While DUI Task Forces do encounter a small percentage of minors in possession of alcohol and youth who are drinking alcohol and driving, there are numerous activities at both the state and community level being conducted specifically to reduce youth alcohol use. Activities targeting youth access to alcohol should be intensified at the state level and expanded to include more local communities. These include Covert Underage Buyers (CUBs), shoulder taps, and Cops in Shops, conducted by the Arizona Department of Liquor License and Control, and the educational and enforcement activities of the Phoenix Police Department Youth Alcohol Squad. As part of the expansion of state and local enforcement activities, State Underage Drinking Prevention Committee should support an increase in the number of enforcement officers within the Arizona Department of Liquor License and Control. Recently the number of officers has been reduced statewide from the already low numbers.

Furthermore, based on the report findings about adult enablers and about youth getting alcohol from friends at their homes and parties, the State Underage Drinking Prevention Committee should support strategies that reduce the availability of alcohol to minors, including:

- Statewide and local social host laws that increase penalties for adults who provide alcohol to minors
- o Party dispersal enforcement for increased enforcement of parties where there is a higher likelihood of minors in possession
- O Statewide keg registration law to allow law enforcement to track the sales of keg beer and trace kegs back to the original adult purchasers

3. The State Underage Drinking Prevention Committee should actively support improvements to the statewide data collection on youth alcohol use and adult perceptions and behaviors related to youth alcohol use.

This report represents the first attempt at a meta-analysis of underage drinking data from statewide and local surveys, juvenile impact panels, law enforcement records, and focus groups. As indicated throughout this report, data collection protocols can be strengthened for many of these data sources to improve the state's ability to track trends and to make data-driven decisions related to youth alcohol use. Specifically, survey instruments should be revised to ensure reliability and validity, and additional data should be collected from the Department of Liquor License and Control and the Phoenix Police Department Youth Alcohol Squad to improve our understanding of how and why their efforts may be reducing youth alcohol use. Additionally, PPP recommends that an inventory be created of all known youth alcohol reduction efforts being conducted at the state and community levels. Such an inventory could facilitate a periodic review and analysis of statewide data to track trends and inform policy and practice.

Background

The Arizona Underage Drinking Committee (UAD Committee) was formed in the fall of 2005 following a national meeting in Washington D.C. attended by nine Arizona state agency directors. The Underage Drinking Committee was initially designated as a subcommittee of the Strategic Prevention Framework State Incentive Grant (SPF SIG) Advisory Council, and understood its role as planning, implementing, and evaluating a state-wide underage drinking initiative, and helping to improve the state's prevention infrastructure, which were goals of the Arizona SPF SIG. Since then, the UAD Committee, as well as the SPF SIG project and Anti-Methamphetamine Initiative, have been positioned within the larger framework of the Arizona SPF SIG Advisory Council.

The UAD Committee planned a social norms strategy regarding perceptions of underage drinking, and they decided to follow the steps of the Strategic Prevention Framework to assess needs and resources, develop further capacity, and identify additional strategies. The Committee planned it's assessment in two parts. One part (research) collected new data that would be used to inform message development for a social marketing campaign regarding attitudes toward underage

drinking. The second component (assessment) included epidemiological data about underage drinking, and an assessment of state level resources, efforts, and policies.

The research component began with a random-sample telephone survey of 1,000 households. The committee contracted with Northern Arizona University to collect and analyze survey data in order to measure adult perceptions about underage drinking. The committee also used data collected from youth via surveys collected at the two Youth Summits conducted by the Governor's Youth Commission (GYC), and contracted with Pima Prevention Partnership to train GYC youth to conduct focus groups with parents. The research component also includes information from juvenile impact surveys conducted by Arizona Students Against Destructive Decisions (SADD), data compiled by the Governor's Office of Highway Safety from funded DUI Task Forces and the 2006 Arizona Youth Survey (AYS).

Due to the rapid development and enhancement of collaborative underage drinking reduction efforts among and between agencies and groups in Arizona, there are additional underage drinking research resources from which the UAD Committee is still working to gather data. For example, the Department of Liquor Licensing and Control conducts a variety of underage buy programs such as shoulder taps and CUBs from which much can be learned about youth access to alcohol. In addition, the Phoenix Police Department Youth Alcohol Squad, one of only two in the United States, is a specialized motor unit with five officers who engage in targeted enforcement and education activities to reduce youth alcohol use. All squad members are highly trained and specialize in the area of traffic-related alcohol and drug education programs and criminal investigations. All are required to be Drug Recognition Experts (DREs) and are certified by the International Association of Chiefs of Police to recognize the signs and symptoms of drug impairment (including alcohol). Data from these efforts will also be a rich source of information for learning what works and doesn't work from a law enforcement perspective to reduce youth alcohol consumption in Arizona.

Limitations

The data sources analyzed in this study are incomplete in that they do not reflect the entire complement of underage drinking prevention/reduction activities in the state of Arizona. While the data presented here do provide an excellent flavor for the underage drinking problems in Arizona, the wisdom that can be gained through exploring all available data sources will add great value to future prevention/reduction activities. Second, the types of data being collected and the methods by which data collection takes place is fairly inconsistent across all sources, with the notable exception of the Arizona Youth Survey (AYS), which has been systematically created, administered, and analyzed in Arizona for many years now. The other data sources used here were either 1) used intermittently (one-time phone survey); 2) biased according to location (Pima/Maricopa Parent Focus Groups), incomplete according to location (DUI data broken down into only two counties plus "rural"); or 3) based on faulty instrument or inconsistent administration (SADD and GYC surveys). A systematic and unified approach to the creation of reliable data collection strategies with consistent implementation across agencies/entities could be combined into a central clearinghouse for data findings and reports. This approach would go a long way to

create a robust and sustainable data infrastructure to help inform underage drinking prevention/reduction activities in Arizona.

Methodology

The Data Sources

Over a period of several months data were collected through the UAD Committee, its partners, and from existing secondary data on underage drinking, such as the Arizona Youth Survey. All data were thoroughly evaluated for internal consistency and reliability, and in some cases data were not used if they contained a large amount of missing data or their source (such as surveys) were administered with inconsistent question types or undocumented timeframes (no record of when surveys were administered). In other cases, data used for this report had already been "cleaned" by the analysts or organizations originally responsible for the data, such as the AYS data set and the Adult Perception Survey, facilitated by Northern Arizona University. Once all data were validated, a metaanalysis was done to identify prominent themes and trends within and across data sets to form a unified picture of underage drinking prevalence and attitudes in Arizona. While all attempts were made to include every source of data relevant to the underage drinking issue in the state, it should be noted that some data sources are missing from this report. In the future, the rapid development of new and enhanced collaborative efforts among many entities across the state to address underage drinking will ensure the provision of additional data on other efforts being pursued.

The Population Represented

The data sources used for this report include 1,000 Arizona adults surveyed in Spring 2006 by telephone, of which 65% were White, 26% were Hispanic, 3% were African American, 5% were Native American, and 2% were Asian American. This racial/ethnic breakdown is consistent for the state population demographics in Arizona. Also included in the data are 38 parents who attended 6 different focus groups held between Tucson and Phoenix during the fall of 2006. Data was also provided from GOHS for the DUI Task Force enforcement period from January 2005- December 2006 for Pima County, Maricopa County, and Rural Counties (a collapsed variable in the original dataset). SADD provided surveys from 125 youth who were attending a diversion program as a consequence of their prior substance abuse or alcohol behavior. Survey data from SADD spanned the 2005-2006 period. The AYS administered in 2006 was used as the basis for reporting alcohol-related data on more than 60,000 8th grade, 10th grade, and 12th grade students in Arizona. Finally, 122 surveys were collected at the Governor's Youth Council Summit with youth during March 2006 and forwarded to PPP for analysis and inclusion in this report.

Results

Overview

Results are reported according to data source, i.e., Arizona Youth Survey, Focus Groups, etc. Frequency refers to the number of responses received for each answer type. Statistical terms and references for analysis vary by data source and are explained within each section. Overall data trends across these sources provide the meta-analytic results at the end of this section.

Data Source Breakdowns

Data Source 1

Governor's Youth Commission Focus Groups

In October and November 2006, 14 members of the Governor's Youth Commission (GYC) were trained by Pima Prevention Partnership (PPP) to conduct focus group research with parents on the topic of underage drinking. A total of six focus groups took place on November 17 in Phoenix and on November 18 in Tucson, with 38 parents from across Arizona participating.

Methods

A convenience sample of 38 focus group participants was recruited by Youth Commissioners, Governor's Office and PPP project staff using word of mouth, email listserv groups, and snowball sampling methods. Each parent participant received a \$20 Target gift card and a meal as incentives for participation. All participants signed consent forms that were explained to them by PPP staff, and all were advised that the focus groups were anonymous and confidential. Each of the six focus groups consisted of five to seven participants, with GYC members serving as facilitators and note-takers. Each focus group took place in a private room, with participants seated around a table. Youth Commissioners served as group facilitators, following a script with eight standardized questions designed to elicit feedback from parents on the topic of youth alcohol use. The focus group script was developed by PPP in collaboration with Youth Commissioners, who selected the eight focus group questions. Data from the focus groups was recorded by GYC members in both written notes and digital audio recordings, which were later analyzed by PPP for the purposes of this report.

Demographics

Parent focus groups included a diverse representation of Arizona parents. Their children ranging in age from 1 to 34 years old, participating parents had varying degrees of direct experience with their children and alcohol. The majority of participating parents had children between the ages of 6 and 20, for whom youth alcohol use was a salient issue.

Table 3: Ages of Children of Parents Participating in GYC Focus Groups

Age Range for Children of	Number of Children
Participating Parents	
Very Young Children Ages 0-5	12
Children Ages 6-12	19
Teens Ages 13-20	36
Adults Ages 21 and older	28

More focus group participants were female (68%) than male (32%), and most came from two-parent households (75%). The majority of participants (77%) identified themselves as living in urban areas, with 19% from rural areas and 5% from tribal lands. Arizona's population is 89% urban, so the focus groups were slightly over-representative of rural populations, including tribes (USDA, 2007). As can be seen in Table 4, below, parent participants were more racially diverse than the Arizona population overall.

Table 4: Racial/Ethnic Distribution of Focus Group Participants Compared to Arizona Population

Race/Ethnicity	Percentage of Participants	Percentage of Arizona Residents**
Caucasian	31%	60%
Hispanic	24%	29%*
Native American	16%	5%
African American	11%	4%
Asian or Pacific	2%	2%
Islander		
Multi-Ethnic	16%	3%

^{*} Hispanics may be of any race, so also are included in applicable race categories.

In terms of education, participants were slightly more educated, on average, than the general population of Arizona. Table 5, below, shows the education distribution of focus group participants.

^{**}Source U.S. Census Bureau: State and County QuickFacts. Updated 1/12/07.

Table 5: Education Levels of Focus Group Participants (n=38)

Education Level	Percentage of Focus Group Participants	Percentage of Arizona Residents*
GED/High School	19%	24%
Associates or 2 Year Degree	16%	33%
		(some college)
Bachelors Degree	37%	24%
Masters Degree	21%	(BA or higher)
Professional Degree	5%	
Non-Responsive	3%	

^{*}Source USDA Economic Research Service: State Fact Sheets: Arizona. Updated 12/27/06. http://www.ers.usda.gov/StateFacts/AZ.htm.

<u>Findings</u>

Parents' Attitudes about Alcohol Use among Teens:

The vast majority of parent participants expressed their concern that alcohol use among teens is a dangerous problem, and most parents also believed that their children had consumed alcoholic beverages at some point in time. Concerns about the dangers of alcohol were held both by parents who held "zero tolerance" attitudes toward alcohol for their children, and by those who allowed their teens to drink at home. Overall, focus group results indicated that more parents had permissive attitudes toward alcohol use than those who strictly forbid it. Among the parents who held permissive beliefs about alcohol use by teens, two common themes emerged: 1) the belief that safety of teenagers was increased by allowing them to drink alcohol at home (risk reduction); and, 2) the emphasis these parents put on teaching their teens not to drink and drive.

What Parents Tell Their Children About Alcohol:

Table 6, below, lists the five most common messages conveyed to children about alcohol by participating parents. When asked what they told their children about alcohol, the most common response of focus group participants was, "Don't drink and drive." The second most common response was from those parents who said they told their children about the history of family problems with alcohol, including alcoholism or personal loss and tragedy. In fact, the majority of focus group participants had negative family history with alcohol or negative personal experiences with alcohol. Parents who spoke of family problems shared these stories with their children as examples of the dangers of alcohol, and to let them know that they may be at an increased risk of alcoholism due to genetics. It is important to note that some of the parents who told their children about their family history with alcohol are the same parents who allowed their children to drink alcohol at home, indicating that they were not necessarily telling their children to abstain. Abstinence from alcohol was the third most common thing that parents told their children about alcohol, and these responses were in the minority. Overall, the messages given to youth by parent participants appeared to be a contradictory mix of warnings of the dangers, while giving permission to experiment or drink in moderation at home.

Table 6: What Parents Tell Their Children about Alcohol (From Most to Least Common Message)

Rank	Parents' Message to Youth
1	Don't drink alcohol and drive
2	Warnings of history of family problems with alcohol
3	Don't drink alcohol at all
4	Drink alcohol responsibly and in moderation
5	Warnings of the dangers of alcohol (not family related)

Instead of focusing on verbal messages, some parents spoke of the importance of being a good role model, and teaching their children through their behaviors rather than their words. These parents included those who drink and have alcohol at home, as well as those who do not drink alcohol or keep it in the house.

How Parents Supervise and/or Prevent Youth Consumption of Alcohol:

There was no clear trend in the information provided by parent participants on how they supervise and/or prevent alcohol use by their children. Some of the answers included not having alcohol in the house, keeping it in a locked cabinet, knowing their children's friends, maintaining open communication with their children, educating their children on the dangers of alcohol, allowing them to drink at home, and encouraging responsible drinking. The variation in answers to this question indicates a lack of commonly known strategies for parents to use in preventing alcohol use by youth.

Parent Perceptions of Youth Access to Alcohol:

As to the availability of alcohol for youth, most parents believed that it came either from home (whether parents knowingly provided it or not), or from older friends, siblings, and relatives. Many parents also thought that teens obtained alcohol at parties. A few respondents pointed out that youth obtain alcohol by asking adult strangers to purchase it for them, an activity known as a "shoulder tap." Other common perceptions were that youth obtain alcohol with false identification, in Mexico, on college campuses, and through theft, as the following table (Table 7) demonstrates.

Table 7: Parent Perceptions of Where Youth Obtain Alcohol

Rank	Source of Alcohol
1	Home
2	Older friends, siblings, relatives
3	Parties
4	Adult/Stranger buyers
5	False identification
6	Mexico
7	College campuses
8	Theft

Parent Perceptions of Why Teens Drink Alcohol:

Parents believed teens drink alcohol for a variety of reasons, the most commonly cited of which were peer pressure, escape from stress and/or pain, following their parents' examples, and low self-esteem. Several parents expressed a belief that youth alcohol use was due to genetics, which may relate back to parents' use of family history as a prevention strategy with their children. Other parents believed that teens drink alcohol because it makes socializing easier, because it is forbidden and therefore a source of curiosity and rebellion, because it is glorified in the media, because kids are bored, and because it is a rite of passage in American culture. Table 8, below, ranks parent perceptions of why teens drink alcohol.

Table 8: Why Teens Drink Alcohol: Parent Perceptions

Rank	Answer
1	Peer Pressure
2	Escape From Stress or Pain
3	Following Parents' Example
4	Low Self-Esteem
5	Genetics
6	Social Lubricant
7	Forbidden Fruit
8	Glorified in Media
9	Boredom
10	Rite of Passage

What Parents Need to Know About Alcohol and Youth:

When asked what they thought parents should know about alcohol and youth, participating parents overwhelmingly focused on consequences, including the effects of alcohol on youth development and legal consequences. Parents asserted that if they were better educated, they could better educate their children about the dangers of alcohol. Many parents also indicated that they would like to learn more about how to communicate with their children about alcohol. Specifically, parents raised concerns about being honest with

their children about their own experiences with alcohol without being hypocritical in expecting youth not to drink. Other responses were that parents should know how to set a good example, and parents should know what their kids are doing. Although it was not the dominant theme, this question also highlighted a common thread throughout the focus groups. Parents believe that teens will experiment, and there is only so much that parents can do. "Don't be naïve," and "Be a realist," were common expressions of this theme. A few parents stated that there should be more punitive measures for parents who provide alcohol to youth. The following Table 9 ranks what participants thought parents needed to know about alcohol and youth.

Table 9: What Parents Need to Know About Alcohol and Youth

Rank	Information/Message Needed by Parents
1	Effects of alcohol on youth development
2	Legal consequences (for youth and parents)
3	Strategies for communication with youth
4	Be a positive role model
5	Know what your children are doing
6	Kids will experiment

How to Reach Parents with Messages about Youth and Alcohol:

Parents had a number of suggestions for the dissemination of a message about youth and alcohol. Most parents stated that a media campaign would be best, with specific suggestions including news reports, television, radio, and even Internet and cellular phone/"iPod" ads for younger people. In conjunction with media messages, many parents believed powerful and/or scary images should be used to shock youth into not drinking, or to shock parents into exerting more control over youth behavior. Several parents noted that alcohol has not received the same media attention as tobacco or some other drugs. Some other suggestions included having group discussions for parents, such as town hall events, having messages delivered by trusted sources such as schools and doctors, and to have youth develop and deliver the messages to parents. Table 10, below, ranks the message dissemination methods most commonly suggested by parents participating in focus groups.

Table 10: How to Reach Parents with Messages about Youth and Alcohol

Rank	Message Dissemination Method
1	Mass media
2	Scare tactics
3	Powerful images
4	Group discussions/forums for parents
5	Schools and doctors
6	Messages by and from youth

Conclusions

Parent Focus Groups conducted by the GYC obtained valuable feedback on the topic of youth alcohol use from a diverse group of parents. Two dominant themes among participating parents were that 1) most parents had negative family history; and/or experience with alcohol and, 2) most parents believed teen alcohol use to be a problem. Despite this, participating parents were divided between harm reduction approaches and zero-tolerance approaches. Harm reduction approaches favored by the majority of parents included teaching children not to drink and drive, and allowing for supervised experimentation and/or moderate alcohol consumption at home. Zero-tolerance approaches were less common, and were advocated primarily by parents who reported very little or no alcohol consumption for themselves.

The least conclusive of the focus group data was regarding the parenting strategies for the supervision or prevention of youth alcohol use. Common themes were not able to be identified in parents' responses on this issue, perhaps indicating a need for more public education targeting parents. Indeed, this appears to be consistent with the participants' assertions that parents need to know more about consequences of youth alcohol consumption, and how to communicate with their children about the issue. Most parents agreed that media messages on these topics would be best in the news, on television, radio, and the Internet, although a variety of other suggestions for message dissemination were made.

Data Source 2

Governor's Office of Highway Safety Law Enforcement Data

Pima Prevention Partnership (PPP) was presented with aggregate enforcement data from the state of Arizona for 2005 and 2006, complied by the Governor's Office of Highway Safety (GOHS). PPP's approach was to review this data with the intent that it could be used by the Governor's Office to produce media and other prevention programs designed to reduce Under Age Drinking. As a result the concentration was on indicators of underage drinking as opposed to adult arrests for DUI. As with the other quantitative sections the following is divided into three sections, Methodology, Results, and Conclusions.

Methods

A. Data Set Description & Preparation

PPP was provided with two Excel spread sheets which unfortunately were in a .csv (comma delimited) format. This was cumbersome, because each file had to be manipulated to produce a fixed field format that could be imported into SPSS and standard Excel .xls formats for analysis. The procedure to translate the .csv to .xls required simple cutting and pasting columns of variables from .csv to a new .xls file. Once in this configuration the data set was exported into a SPSS format for further refinement. This included translating

the date field into a readable form along with identifying and labeling each variable. At this point, SPSS syntax was used to categorize each date into a month category along with translating each of the task forces into mutually exclusive counties. The result was a set of variables for each month of each year 2005 through 2006 per three county designations, Maricopa, Pima and all other counties designated "Rural." It was felt that segregation of the data into these categories would allow easier interpretation of the data to produce trend lines, and test for differences between counties and time periods. The result was a 2005 and 2006 file which included the variables shown in Table 11, below.

As can be seen from Table 11, only two variables seemed to be germane to the issue of underage drinking; those were DUI arrests for defendants under the age of 21 and arrests of minors for underage consumption and/or possession. Thus, the data sets were reduced to include only the relevant variables for analysis (see Table 12 below).

Table 11: GOHS Law Enforcement Data Set Variables*

Variable Name	Description
date	Date of task force mm/dd/yy
Month	Month of the task force generated from date field above
tskforce	Task Force name
agency	Agency within the Task Force name
County	County category created from the Task Force and Agency name
nagency	Total number of Agencies
noffers	Total number of officers deployed on that date
contacts	Total number of contacts (stops)
extreme	Total number of extreme DUI arrests for that date
agrvtd	Total number of aggravated DUI arrests for that date
misdm	Total number of misdemeanor DUI arrests for that date
Variable Name	Description
aft2am	Total arrests after 2 am
priors	Total number of arrests with prior DUI arrests
avBAC	Average breathalyzer for all arrests
Seat	Total number of seat belt citations
child	Total number of child restraint citations
duiundr21	Total number of DUI arrests for people under the age of 21
minor	Total number of arrests of minors for Minor in possession of alcohol
DRE	Total Drug Related Enforcement
Other	Total other violations

^{*} Category spelling and capitalization is from the original document provided by GOHS

Table 12: Final Data Set after Reduction Procedure

Variable Name	Description				
Month	Month of the task force generated from date field above				
County	County category created from the Task Force and Agency name				
Variable Name	Description				
noffers	Total number of officers deployed on that date				
contacts	Total number of contacts (stops				
duiundr21	Total number of DUI arrests for people under the age of 21				
minor	Total number of arrests of minors for Minor in possession of alcohol				

The number of law enforcement officers and number of contacts were kept as moderating variables which were tested to determine if there was a correlation between deployment and the two dependent variables of most interest to this project; DUI under 21 (DUI<21) and minor in possession/consumption (MIP). Given this configuration, it was discovered that the SPSS data sets were not amenable to trend analysis because of the relatively small sample size, i.e. 12 months per year or 24 data points. Because of this, the data was segregated into separate files per county per month and then exported as Excel files to produce line and bar charts to depict the trend of underage DUI<21 and MIP.

B. Analysis

The primary analysis was visual analysis of state and county trend lines for DUI<21 and MIP. In addition to this regressions were conducted to test the relationship between officer deployment and number of contacts as well as DUI<21 and MIP. Finally, simple t-tests and ANOVA's were used to test the significance of differences between counties. It must be understood that this approach was designed to provide information about the inferred relationship between enforcement and underage drinking.

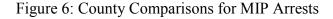
Results

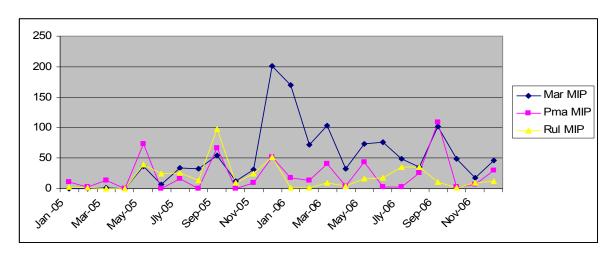
The following, Figure 4, depicts the statewide number of arrests for DUI<21 and MIP.

Figure 4: Statewide Underage DUI Arrests and Arrest for Minor in Possession

As can be seen from the above, there is an overall increased trend in arrests from Jan 2005 through Dec 2006 for DUI<21, followed by a decline in 2006. With the exception of the spike in December 2005, MIP appears to be relatively stable at a very low level of activity. At the time of this report it was uncertain what caused the spike in both of these variables, although review of the county plots which appear below (Figure 5) indicate that Maricopa County was most responsible for these spikes. Maricopa County also appeared to be responsible for the spike in MIP, as shown in Figure 6, below.

Figure 5: County Comparisons for Underage DUI Arrests





Clearly there was a higher level of activity in Maricopa County for December 2005. Review of the number of officers deployed for these time periods illustrates this point.

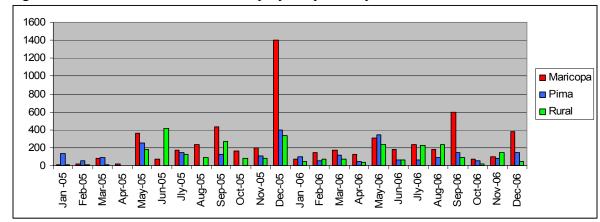


Figure 7: Total Number of Officers Deployed by County

It is unknown why the increased level of enforcement for this one month, December 2005, out of 24. One hypothesis was that the data may have been incorrect. To determine this, each step of the data download and manipulation process was repeated and yielded the same results. Upon inspection of the data for Maricopa during Dec 2005 it was discovered that DUI Task Forces were deployed 18 days in December 2005 versus 6 days in December 2006. Thus, the reason for the increased levels in December 2005 was simply that there were more targeted DUI enforcement days. The reason for this level of deployment however is unknown at this time.

Regression Analyses: Total DUI's

The trend data appeared to reinforce the commonly held belief that increased enforcement yields greater arrest rates. To test this, a series of multiple regression analyses were conducted including regressing the total number of arrests per task force per day against three independent variables in the data; number of officers, the month of the year and location as reflected by county.

Table 13: Total DUI Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32642.174	3	10880.725	118.246	.000ª
	Residual	212744.2	2312	92.017		
	Total	245386.4	2315			

ANOVA^b

a. Predictors: (Constant), month, number of officers, county

b. Dependent Variable: total

The tests of the beta coefficients revealed two significant independent variables, number of officers and county. Although there was a significant non zero R² the coefficient of determination was .13 which simply means that only 13 % of the variance in the total number of arrests can be accounted for by these two variables. Thus, arrests for DUI appears to be explained or linked to factors other than the number of officers and where

they are deployed. Given this overall finding for adults, the data was reduced to the combination of those arrested for <21 and MIP, and these were regressed against number of officers, county and month. Regardless of this significant finding, the amount of explained variance in <21 arrests was only 7%.

Table 14: Analysis of Variance for DUI < 21 years

ANOVA^b

	Model		Sum of Squares	df	Mean Square	F	Sig.
	1	Regression	1863.162	3	621.054	58.519	.000 ^a
		Residual	24537.026	2312	10.613		
ı		Total	26400.188	2315			

a. Predictors: (Constant), month, Number of Officers, county

b. Dependent Variable: minr21

Review of the regression analyses revealed that all three independent variables officers, county, and month) significantly contributed to the R² value, or predictive strength of the association between law enforcement activity and DUI arrests. Because of this, the data was subjected to individual test of difference for the total arrests for DUI <21 and MIP. It was felt that this additional analysis was warranted because of the nature of this project as opposed to conducting further analysis of the adult data. The tests of hypothesis for the youth arrests are included in the next section.

Analyses showed that there was a significant differences between counties for the total number of alcohol related arrest for persons <21. Clearly the urban counties, Maricopa and Pima, arrested significantly more <21 than rural counties. The caveat when interpreting this data is that on average there were only 1 or 2 minors arrested for either DUI <21 or MIP during these DUI Task Force activities. Although statistically significant, there was a very small number of youth arrested for alcohol offenses during these task force sweeps.

Table 15: Explained Variance by County for Arrests <21

		Mean			95% Confidence Interval		
(I) county	(J) county	Difference (I -J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Maricopa	Pima	126	.182	.770	55	.30	
	Rural	.747*	.161	.000	.37	1.12	
Pima	Maricopa	.126	.182	.770	30	.55	
	Rural	.873*	.197	.000	.41	1.34	
Rural	Maricopa	747*	.161	.000	-1.12	37	
	Pima	873	.197	.000	-1.34	41	

^{*}The mean difference is significant at the .05 level.

Table 16: Analysis of Variance between Months for DUI <21 years

ANOVA

minr21

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	356.056	11	32.369	2.864	.001
Within Groups	26044.132	2304	11.304		
Total	26400.188	2315			

The significant F-value in the analysis above led to further tests used to discover which months were significantly different from one another. The table from this procedure was considered too large for inclusion in this report, however is available upon request. That output revealed a significant difference in the average number of <21 arrests for alcohol for January 2005 versus April, May, July, August, October, November and December. In each of these cases the average arrests for January were significantly greater than the other months listed above. As with the county data, it should be noted that although there were significant differences there appeared to be little meaningful differences. The reason for this was that only one or two <21 were arrested during these months.

Conclusions

The enforcement data, although informative, did not support the conclusion that DUI Task Forces have a statistically significant impact on apprehending underage drinkers. This is not surprising, in that the intent of these deployments is not specifically designed to impact this social problem. It was interesting, however, to discover the low, albeit significant, correlation between the number of officers deployed and the overall number of DUI arrests. This was especially true for <21 alcohol related arrests.

Data Source 3Adult Perception Telephone Survey 2006

Pima Prevention Partnership (PPP) was presented with qualitative and quantitative data from various sources across Arizona. This data included both youths' and adults' awareness and perception of underage drinking in Arizona as well as law enforcement's response to drunk driving and underage drinking. PPP's approach to this data was to mine the various data sources for information that could be used by the Governor's Office to produce media and other prevention programs designed to reduce underage drinking. Although the data sources varied in both rigor and type, PPP's objective was to discover common themes that could be used for this prevention effort. The first data set analyzed by PPP was the 1000 responses from the 2006 adult survey administered by Northern Arizona University. The report is divided into three major sections, Methodology, Results and Conclusions.

Methods

What follows is a description of the methods used to analyze the adult survey data. The methodology has been organized into two sections: A. Data Set Description; and B. Analysis, containing a description of PPP's psychometric procedures and data analysis techniques.

A. Data Set Description

The adult survey data arrived as a SPSS .save file which contained 1000 respondents' answers to a telephone survey which contained 34 questions about under age drinking and 8 demographic variables. With the exception of years lived in Arizona and years of age at time of response, all item responses were either at the nominal or ordinal level of measurement. In addition each of the items, both the questions about underage drinking and the demographic questions included a "do not know" or "refused" category.

B. Analysis:

Psychometrics

The adult survey data did not arrive with a code book or with the results of psychometric analysis. Because of this, the data was first subjected to a reliability analysis. It must be understood that prior to the analysis all responses to items coded with "don't know" or "refused" were set to missing values so that the scale values would not compromise the reliability analysis. There was less than 1 % which had to be ignored. The reliability analysis yielded a Cronbach's Alpha = .345. This demonstrated that the instrument attained a low degree of reliability which, in turn, indicates that there was a conversely high level of random measurement error. What this simply means is that the results yielded by this instrument may not be repeatable if different respondents are presented with this survey on a different occasion. Thus, generalizing results of the raw data to the adult population of Arizona would lead to false conclusions.

Partially in response to this, the data was subjected to a simple principle component analysis. This yielded a three factor solution that reduced the number of items to those that inter correlated within each factor. Those factors and their component items were;

Factor 1: Concerns for youth

- How concerned are you about youths smoking cigarettes and using tobacco?
- How concerned are you about youths engaging in sexual activity?
- How concerned are you about youths drinking alcohol?
- How concerned are you about youths smoking marijuana?
- How serious a problem is alcohol use by people under 21?
- Is it OK for under-21's to drink under the supervision of their parents or guardians?
- Is it OK for under-21's to drink under the supervision of other adults over 21?
- Is it OK for under-21's to drink on special family occasions?

- Is it OK for under-21's to drink as part of rites of passage?
- Do you think it's ever okay for an adult to provide alcohol to a person under 21?

Factor 2: Accessibility and acceptance

- Is it OK for under-21's to drink under the supervision of their parents or guardians?
- Do you know adults/parents who let people under 21 drink alcohol in their homes?
- Do you know anyone who has provided alcohol for people under 21?
- How hard do you think it is for a person under 21 to get alcohol in Arizona?

Factor 3: Penalties and policies

- Should we strengthen penalties for people under 21 purchasing alcohol?
- Should policies focus more on adults who provide alcohol to under-21's?
- Should beer kegs be required to have a traceable registration number?

These items were extracted from the original raw data set and subjected to another reliability analysis which yielded Cronbach's Alpha = .748. Although this did not reach the accepted standard of .80, it did demonstrate a dramatic decrease in measurement error which increases the generalizability of results from these 16 items to the general adult population of Arizona. As such, these 16 items and three factors were used to make conclusions and recommendations for an underage drinking campaign.

Data Analysis

This data set could have been used to generate analyses to test various theoretical hypotheses. The intent of this project, however, was not heuristic. As a result the analysis was limited to discovering if there were significant differences or associations between the demographic variables collected and the 16 items extracted from the original data set. It was reasoned that this approach would provide the Governor's Office with demographic characteristics associated with particular perceptions and attitudes that could be used as targets for prevention messages and programs. The demographic variables recorded in the data and thus used for this analysis were the respondents:

- Age in years
- Gender (Male Female)
- Race (White, Hispanic, African American, Native American & Other)
- Children under the age of 21 living in respondents home (Yes No)
- AZ FIPS County Code

The first procedure was to calculate a factor score per respondent per factor. The result was a composite factor score for *concerns for youth*, and *penalties and policies*. The scales for the factor of *knowledge of accessibility and parental acceptance* were not comparable. Therefore a composite score was ill advised. Thus, each of the four items for this factor were treated individually. The composite scores for *concern* and *penalties* were interval levels of measurement and therefore could be subjected to a series of ANOVA's and, in some cases, independent t-tests for each level of the 6 demographic variables. The four

items for knowledge were cross-tabulated by each level of the demographic variables and tested for significance using chi-square analysis. Given a significant ANOVA or t-value the data from a specific factor was subjected to two forms of post-hoc analysis. The first was a simple Tukey post-hoc test. The second was a series of cross tabulations and chi-square analyses that were used to ascertain the specific items within factors that contributed to the overall significant F- or t-values. This enabled interpretation of specific items and thus provided the foundation for interpretation of common themes that could be used for prevention.

Findings

It must be understood that the total sample results revealed that the overwhelming majority of adults responded in the socially desirable categories. For example, 80 to 90% of the sample were very or somewhat concerned about youth and smoking, sexual activity, alcohol and marijuana. Indeed more than 90% felt that alcohol was a serious or moderate problem. In addition 80 to 90% of the sample felt that it was not okay to provide alcohol to people less than 21 years of age. More than 60% support stronger penalties and policies for providing alcohol to minors. Finally, the majority (65 + %) knew parents or adults who have provided alcohol to people under the age of 21 and they feel that it is relatively easy for younger people to find alcohol. Given this understanding, the following results illustrate the subtle yet statistically significant differences for each demographic variable in relation to responses to questions within each factor of the adult survey. This section has been cast into two sections. Section 1 contains the results per each demographic variable within the factors of *concern* and *penalties*. Section 2, contains the results for the *access* and *acceptance* factors.

Section 1: Concerns & Penalties

Results of the ANOVA's for *concern* and *penalties* are cast in the following table, with the demographic variable appearing in the left hand column.

Table 17: Analysis of Variance by Demographic Characteristics in Sample

Demographic Characteristic	Concerns for Youth	Penalties and Policies
Age	*.005	*.000
Gender	*.000	*.000
Race	*.000	.157
County	.350	.219
Parent	*.000	*.022

^{*} Statistically significant relationship

As can be seen from Table 17, there was a significant difference in the levels of Age, Gender, Race and Parent for *concerns*. There were significant differences obtained for *penalties* among the demographic variables of Age, Gender and Parent. Post-hoc analysis revealed the levels within each of these variables which contributed to these significant results. The following contains the results of these analyses.

Age: Review of the post-hoc (Tukey) analysis demonstrated that a significant difference between the 18-34 age group and all other age groups (35-49, 50-64, 65+) were responsible for significant difference results for both *concern* and *penalties*.

Concerns

A review of cross tabs for each *concern* item which obtained a significant chi-square value revealed that the 18-34 group was:

- Less concerned about youths engaging in sexual activity
- Less concerned about youths drinking alcohol
- Less concerned about youths smoking marijuana
- Viewed alcohol as less of a serious problem than other age groups
- Were more likely to condone < 21's drinking under supervision of parents or guardians
- Were more likely to condone < 21's drinking under the supervision of other adults
- Were more likely to condone < 21's drinking on special family occasions
- Were more likely to condone < 21's drinking as part of rites of passage

Penalties

The 18-34 group did not support:

- Strengthening penalties for people under 21 purchasing alcohol illegally
- Policies that focus on adults who provide alcohol to under-21's
- Beer kegs having traceable registration numbers

Gender: Review of the subsequent chi-square analysis demonstrated a significant association between some of the concern and penalty items by gender. It must be understood that because there were only two categories for gender, post-hoc (Tukey) analysis was not appropriate.

Concerns

A review of cross tabs for each *concern* item which obtained a significant chi-square value revealed that adult females were more likely than males to be:

- Concerned about youths smoking cigarettes and using tobacco
- Concerned about youths engaging in sexual activity
- Concerned about youths drinking alcohol
- Concerned about youths smoking marijuana
- Males viewed alcohol as less of a serious problem than females

Furthermore, cross tabs for each *concern* item showed that:

- Females were less likely to condone < 21's drinking under supervision of parents or guardians
- Females were less likely to condone < 21's drinking under the supervision of other adults
- Females were less likely to condone < 21's drinking on special family occasions
- Females were less likely to condone < 21's drinking as part of rites of passage
- Females were less likely to agree that it's ever okay for an adult to provide alcohol to a person under 21

Penalties

The significant chi-square differences for gender revealed that:

- Females were more likely to support strengthening penalties for people under 21 purchasing alcohol illegally
- Females were more likely to support policies that focus on adults who provide alcohol to under-21's

Race: Post-hoc analyses revealed that the overall F-test results for *concern* were caused by the significant differences between Whites and Hispanics. No other race category comparisons approached the .05 level in the Tukey analysis.

Concerns

A review of cross tabs for each *concern* item which obtained a significant chi-square value revealed that:

- Hispanics are more likely to be concerned about youths smoking cigarettes and using tobacco than Whites
- Hispanics are more likely to be concerned about youths engaging in sexual activity than Whites
- Hispanics are more likely to be concerned about youths drinking alcohol than Whites
- Hispanics are more likely to be concerned about youths smoking marijuana than Whites
- Hispanics are more likely to view alcohol as a serious problem than Whites
- Hispanics are less likely to condone < 21's drinking under supervision of parents or guardians than Whites
- Hispanics were less likely to condone < 21's drinking on special family occasions than Whites
- Hispanics were less likely to condone < 21's drinking as part of rites of passage than Whites

Parents: Review of the subsequent chi-square analysis demonstrated a significant association between some of the concern and penalty items and parental status. It must be understood that because there were only two categories for parental status, post-hoc (Tukey) analysis was not appropriate.

Concerns

A review of cross tabs for each *concern* item which obtained a significant chi-square value revealed that:

- Parents were more concerned about youths smoking cigarettes and using tobacco than non-parents
- Parents were more concerned about youths engaging in sexual activity than non-parents
- Parents were more concerned about youths drinking alcohol than non-parents
- Parents were less likely to condone < 21's drinking under supervision of parents or guardians than non-parents
- Parents were less likely to condone < 21's drinking under the supervision of other adults than non-parents
- Parents were less likely to condone < 21's drinking on special family occasions than non-parents
- Parents were less likely to condone < 21's drinking as part of rites of passage than non-parents

Penalties

One of the *penalty* items produced a significant chi-square value.

• Parents were more likely to support beer kegs having traceable registration numbers than non-parents.

Section 2: Access and Acceptance

As with the above analyses, contingency tables with chi-square analyses were generated for each demographic variable by each of these questions. Results from the question, "Is it OK for under 21's to drink under the supervision of their parents or guardians?" is not included because the analysis of this item per demographic is included in the previous analysis.

Table 18: Chi-Square Analysis for Access to Alcohol

	Is it OK for under- 21's to drink under the supervision of their parents or guardians?	Do you know adults/parents who let people under 21 drink alcohol in their homes?	Do you know anyone who has provided alcohol for people under 21?	How hard do you think it is for a person under 21 to get alcohol in Arizona?
Age	*.033	*.000	*.000	*.000
Gender	*.000	.212	.246	.143
Race	*,000	.059	.554	*.000
County	.149	*.004	.210	.135
Parent	*.000	*.037	*.050	*.048

^{*} chi-square value < .05

Age: A review of the chi-square analysis demonstrated that the significant chi-square was the result of the difference between observed and expected values for 18-34 age group as opposed to all other age groups (35-49, 50-64, 65+). Thus it was concluded that the 18-34 group:

- Knew more adults/parents who let people under 21 drink alcohol in their homes than the other age groups.
- Knew more people that had provided alcohol for people under 21 than the other age groups.
- Did not feel that it was very hard for a person under 21 to get alcohol in Arizona

Gender: With the exception of "Is it OK for under-21's to drink under the supervision of their parents or guardians?" which has been interpreted in the previous section, there were not significant chi-square values for gender and the remaining three questions for this factor. Therefore, no interpretation was advisable.

Race: There was only one item for this factor which yielded a significant chi-square value: "How hard do you think it is for a person under 21 to get alcohol in Arizona?" A review of the contingency table indicated that:

- More Hispanics responded that it was "very easy" for <21's to obtain alcohol than expected and fewer Whites responded that it was "very easy" for <21's to obtain alcohol than expected
- A greater proportion of Whites felt that it was "somewhat easy" for <21's to obtain alcohol than Hispanics

County: One item for this factor yielded a significant chi-square value, i.e., "Do you know adults/parents who let people under 21 drink alcohol in their homes?" A review of that contingency table revealed:

• Fewer adults in Maricopa county stated that they knew adults/parents who let <21's drink in their homes than was expected.

• Conversely in Pima County more adults stated that the knew adults/parents who let <21's drink in their homes.

Parent: Review of the parent contingency tables indicated that;

- More parents than expected indicated that they knew other parents or adults who let <21's drink alcohol in their homes.
- More parents indicated that they knew adults who had supplied alcohol to <21's than non parents.
- More non parents versus parents felt that it was very easy for <21's to obtain alcohol in Arizona.

Conclusions

One theme that emerged from these results was that the 18-34 male demographic was less concerned about youth under 21 years old consuming alcohol. In addition, they seem to condone supplying alcohol to underage drinkers, and do not appear to support more stringent policies or laws governing this behavior. As a result it is recommended that this group become the target of a media campaign that stresses the ill effects of providing alcohol to minors. In addition, the Governor's Office may consider increased penalties for adults over 21 who supply alcohol to minors.

Data Source 4

SADD Juvenile Impact Panel Surveys

The Arizona Youth Survey 2006 (AYS) was a robust indicator of the rate of underage alcohol consumption in the state of Arizona. For example, the results of the survey reported that 75% of youth in the 12th grade had consumed alcohol. In addition, 47% of 12th graders had used alcohol within 30 days of filling out their survey and 28% had engaged in binge drinking. It was also alarming to discover that almost 78% stated that it was easy to access alcohol. The AYS data however did not contain specific information about the pathway of alcohol from its source to underage drinkers or where youth go to consume alcohol. It was hoped that the data provided by Arizona Students Against Destructive Decisions (SADD) would provide this information because it contained items regarding access and it was provided primarily by underage drinkers. It was felt that this data could reveal information which could be used by the Governor's Office to enhance media and other prevention programs designed to reduce underage drinking.

Methods

A. Data Set Description & Preparation

Pima Prevention Partnership (PPP) was originally provided with a number of text documents from SADD which contained the aggregated percentage of youth who responded to a set of questions after completion of a court-ordered program designed to prevent youth from further alcohol and drug offenses. Because the information was aggregated and in text documents, it was unusable as data to determine alcohol related behaviors of these youth. As a result, PPP requested and received a set of questionnaires from October, November and December 2006 which contained responses to multiple choice items from three SADD Juvenile Impact Panel sessions in 2006: October, November and December. In addition, SADD provided 2005 data which was not in a multiple choice format; rather all responses were verbatim hand-written comments. Although this was valuable information, it was not amenable to statistical analysis. Therefore qualitative review of the data was used to corroborate the analysis of the 2006 data.

The 2006 data was coded and entered into an Excel spread sheet and then imported into SPSS for analysis. A frequency analysis of this data set produced 125 youth referred for an alcohol related offense. These respondents became the sample used for statistical analysis. Variables included in the 2006 data are shown below, in Table 19.

Table 19: List of Variables in the SADD Juvenile Impact Panel Survey Data

Variable Name	Description
Date	Date of the panel mm/dd/yy
Attendee	Attendee type completing questionnaire1 = Parent, 2 = Youth
Overall	Overall impression of the presentation
Offense	Offense that referred youth to the presentation
Purchased	Where alcohol was purchased
Who Provided	String variable on where youth obtained alcohol
Received Alcohol	Where the youth received alcohol
Ingest Alcohol	Where youth ingested alcohol
Ingest Drugs	Where youth ingested drugs
First Offense	Weather or not it was their first offense
Like Most About	What they liked most about the presentation
Presentation	
Like Least About	What they liked least about the presentation
Presentation	
Useful	If they found the information useful
Additional Comments	Additional comments

As can be seen from the above not all of these variables were germane to the issue of underage drinking. Given this, the data base was reduced for analysis to the variables shown in Table 20, below.

Table 20: List of Variables After Data Reduction Procedure

Variable Name	Description
Date	Date of the panel mm/dd/yy
Attendee	Attendee type completing questionnaire1 = Parent, 2 = Youth
Offense	Offense that referred youth to the presentation
Purchased	Where alcohol was purchased
Who Provided	String variable on where youth obtained alcohol
Received Alcohol	Where the youth obtained alcohol
Ingest Alcohol	Where youth ingested alcohol
First Offense	Weather or not it was their first offense

The "attendee" and "offense" variables were used to parse the data set and include only those youth who completed a survey and were referred for an alcohol-related offense. The "where purchased" data were verbatim locations of where youth actually purchased alcohol. There were very few who purchased alcohol, so this variable was not coded or analyzed. Review of the "who provided" variable was also not as descriptive as the received alcohol variable. It was determined that the most accurate description of how youth obtained alcohol was from the "received alcohol" variable. Therefore, this variable was used in the final analysis as an indicator of the pathway of alcohol to underage drinkers. The final set of variables used for this analysis was how liquor was obtained and where the alcohol was ingested. It was felt that analysis of these variables would yield more useful information about where and how youth obtained alcohol and where they consumed it.

B. Analysis

The primary analysis of the 2006 data involved the review and interpretation of simple frequency distributions and valid percentages per response category. It was felt that the data set was not robust enough for hypothesis testing. However, the frequencies were at least adequate to indicate a general indication of how youth obtain alcohol and where they consume it. In addition to this analysis, the 2005 qualitative data was visually reviewed to discover common themes and compare these themes to the results of the frequency analysis.

Results

As illustrated in Table 21, below, the most prevalent conduit of alcohol to youth is through their friends (4%) and or it is provided at a party (39.3%). This accounted for 79% of the valid responses. Very few, i.e., about 11% of these youth, indicated that they obtained alcohol from either their parents or obtained it from their home (1.6% + 9.8% = 11.4%). These two major sources accounted for more than 90% of the alcohol received by youth, with the rest obtained via "beer runs" or by having a stranger purchase it for them. It is interesting to note that the verbatim comments indicated that "beer runs" included both illegally purchasing alcohol and stealing it from convenience stores.

Table 21: Where Youth Obtain Alcohol

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Friend	49	39.2	40.2	40.2
	Stranger	7	5.6	5.7	45.9
	My Parents	2	1.6	1.6	47.5
	Beer Run	4	3.2	3.3	50.8
	Party	48	38.4	39.3	90.2
	At Home	12	9.6	9.8	100.0
	Total	122	97.6	100.0	
Missing	System	3	2.4		
Total		125	100.0		

Review of the qualitative 2005 data confirmed the above conclusions regarding the pathway of alcohol to those under the age of 21. There were two common themes (friend & party) discovered in these comments. For example, these verbatim comments typify this data: "from a friend," "from a friend who was older," and comments such as "it was at the party," "someone at the party," "at the house party from other teens who were there," "cousin and her boyfriend," "it was at the party brought by other kids," "there was alcohol at the party," "it was at the party before I arrived," and "friends gave to me." It was not surprising to discover that where young people consume alcohol was in similar social contexts to where they obtained the alcohol.

Table 22, below, shows that the most common venue of alcohol consumption for these youth was either at a party (42.4%) or at a friend's house (29.7%). These two locations comprised 72.1% of the responses from the 2006 sample. It was a bit surprising to observe that 5.1% stated that they consumed alcohol at school. Again the verbatim comments from the 2005 qualitative data supported these frequencies. For example youth said "friends house" "party" "friend's party" or "hotel room (a flipping nice one, too)." It is assumed that the hotel room was the site of a party. The point is that youth consume alcohol in the same places where they obtain it.

Table 22: Where Youth Consume Alcohol

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Friend's house	35	28.0	29.7	29.7
	Park	6	4.8	5.1	34.7
	Party	50	40.0	42.4	77.1
	Parking Lot	9	7.2	7.6	84.7
	School	6	4.8	5.1	89.8
	Other	12	9.6	10.2	100.0
	Total	118	94.4	100.0	
Missing	System	7	5.6		
Total		125	100.0		

Conclusions

Although this data is not extensive it did lead to at least two conclusions regarding underage drinking. First, it is recommended that SADD or a similar organization develop standardized instruments to measure youths' reports of where they obtain alcohol, how they obtained it, and where they go to consume it. In addition these instruments should contain demographic variables such as age, grade level, age at first usage, residence, as well as covariate measures such as family structure, amount and type of parental supervision, influence of peers, youth access to various types of media such as internet and iPods, and who they consider credible sources regarding drinking.

Second, this data clearly indicates that youth obtain and consume alcohol obtained from their friends and/or at parties. The qualitative data indicated that, most likely, the friends are older and can purchase the alcohol for younger friends. For example, older boy friends providing alcohol to under 21 year old females or girl friends. Given this information, it seems that media and prevention efforts should target this 21 - 34 year old demographic as well as parents who allow their children to have unsupervised parties where alcohol is provided or underage drinking is seen as acceptable.

Data Source 5

GYC Go Lead Our World (GLOW) Surveys

Survey data on youth perspectives of alcohol use was collected at two Governor's Youth Commission (GYC) Youth Summits, held in Casa Grande on March 10, 2006 with high school students, and in Flagstaff on March 30, 2006 with middle school students. PPP was provided with two sets of survey data from these Youth Summits. The Go Lead Our World (GLOW) survey was created and implemented by Youth Commissioners, and is discussed in detail below. Also, a Youth Summit Pre-Post Survey, focused on youth alcohol use, was administered at the beginning and end of each GYC Youth Summit. Unfortunately, a review of the pre-post survey aggregate data and survey instruments brought the overall validity of the pre-post data into question. Many survey items were not consistent from pre-test to post-test, and were therefore not comparable. Since a wealth of reliable data on youth alcohol use and youth perceptions was available through other data sources, including the Arizona Youth Survey (AYS) and the SADD Juvenile Impact Panel Surveys, PPP decided not to include the Youth Summit Pre-Post Surveys in this analysis.

The Go Lead Our World (GLOW) survey was a 21-item open-ended questionnaire administered to students after they viewed the Mothers Against Drunk Driving (MADD) informational video, "The Spot," at the Governor's Youth Commission (GYC) Youth Summit meetings. A total of 122 surveys were collected, 59 from high school students and 63 from middle school students. Demographic questions were not included in the GLOW survey. However, demographic information collected from the GYS Youth Summit Pre-Post Surveys implemented at the same event suggests that this sample included respondents included students in grades six through twelve, students from a range of racial/ethnic backgrounds, and more females (66%) than males (34%). More than half of the youth attending the Youth Summits reported getting "mostly A's" for grades.

Methods

The Governor's Youth Commission provided full access to the GLOW survey data to Pima Prevention Partnership (PPP). For the analysis, PPP used summary documents created by the GYC, which compiled all written responses under each survey item. PPP staff grouped together similar responses under each item, allowing for the identification of common themes.

In the section that follows, results for each survey item are summarized. Out of the 21 numbered survey items, 12 were multi-part questions to be answered in the two-line answer spaces provided. As a result, responses were sometimes partial and unclear as to which component of the question was being answered. While data from multiple questions cannot be reliably separated out of these answers, overall interpretations are provided.

Results

Is it normal for youth to drink?

Perceptions of whether it is normal for youth to drink varied between high school and middle school students. Almost all high school students answered, "yes," and the few who said "no" made additional comments regarding their personal standards rather than speaking to a perceived norm. Among middle school students, roughly half believed that it was normal for youth to drink and the other half did not. Confusion about the intended definition of "normal" in this question was evident by the responses, some of which spoke to a perceived norm and others of which spoke to personal values.

How does the music industry influence underage drinking?

Because this question presumes that the music industry influences underage drinking, very few students indicated that it did not. Overall, high school students pointed to the way the industry and particular musicians portray drinking as a fun activity, alcohol promotions at concerts, and lyrics about alcohol. Most middle school responses focused on lyrics about alcohol. A few middle school students mentioned the way drinking is portrayed by musicians, and only one mentioned promotions at concerts.

What popular TV shows involve underage drinking?

Both high school and middle school students named a wide variety of television shows that involve underage drinking. The most commonly named shows are listed below, in rank order:

- 1. That 70's Show (n=32)
- 2. Real World and/or MTV (n=26)
- 3. The OC (n=19)
- 4. South Park (n=18)
- 5. The Simpsons (n=14)
- 6. Family Guy (n=13)
- 7. Degrassi (n=11)
- 8. One Tree Hill (n=9)
- 9. King of the Hill (n=5)
- 10. College Hill (n=4)

Would you wear a shirt that advertises alcohol?

Results of this question differed between high school and middle school students. Responses indicated that about half of the high school students would wear a shirt advertising alcohol. Approximately one-quarter of high school students said they would not wear a shirt advertising alcohol, and the remaining quarter said that it depended on the style of the shirt (e.g., whether it was "cute" or "funny"). In contrast, the majority of middle school students indicated that they would not wear a shirt advertising alcohol.

Does your cultural background influence your perspective of alcohol?

Roughly half of all respondents said that their cultural background influenced their perspective of alcohol. Because this question was worded to elicit a yes/no response, most students did not provide an explanation of their answer. Among those who did explain their yes/no answers, many comments were unclear as to which culture was being referenced and whether that culture encouraged or discouraged the use of alcohol. Of the few responses that could be interpreted, Mexican, Irish, and African American cultures were said to encourage drinking, as was living on the reservation. One student specified that being Baptist did not allow for underage drinking.

How close is alcohol to your house or school? How many places within one mile?

Among both high school and middle school students, the vast majority cited multiple outlets within one mile of their homes. Roughly one-third of students stated that alcohol was in their homes.

Are there stores where you could buy alcohol and they wouldn't check your ID? Could you get a fake ID? Do you or your friends have one?

Among high school students, roughly half indicated that they could purchase alcohol without having their identification checked. Many thought they could obtain false identification, and far fewer said they or their friends possessed false identification. Almost all middle school students stated that they could not purchase alcohol in stores without having their identification checked, and the majority of them added that they could not obtain false identification.

Is it easiest to get certain types of alcohol? Why? What is hardest? Why?

The majority of high school students believed it was easiest to get beer and wine coolers because they are less expensive. These students perceived wine and hard liquor as being more expensive and harder to get. A few made comments that cost was not the only factor involved, and that clerks might prevent them from purchasing hard liquor. Middle school students, however, gave more mixed responses about obtaining alcohol. Responses were evenly split between those who thought that no type of alcohol was easy to get, and those who thought that beer and/or "whatever is in the house," were easiest to get.

What's the age range of people you drink with? What's the age range of people who give you the alcohol?

Most responses to this question listed one age range, and it could not be determined which of the two questions they were answering.

Do your parents give you alcohol? If your parents wouldn't provide alcohol for you, do you know any other adult or parent who might?

The majority of both high school and middle school students said that their parents do not give them alcohol. Of those who said yes, almost all indicated that they were allowed "little sips" or small amounts on special occasions. More high school students than middle school students knew of other adults who would give them alcohol.

Is there usually alcohol in your house? How easy is it to get? Would your parents know if alcohol was missing from your house?

Three quarters of high school students and two-thirds of middle school students reported that there is usually alcohol in their homes. Of these, the majority reported that alcohol is easy to get in their homes. Results were more mixed as to whether parents would know if alcohol was missing. Most high school students said their parents would not know, whereas most middle school students said they would know.

Do your parents drink on a regular basis? How frequently do you see them consume alcohol?

There was great variation in how respondents appeared to define "regular basis," making it difficult to produce a reliable interpretation of responses for this survey item. For instance, some would say "no" and then indicate that parents drank on a weekly basis. As to the frequency of parents' drinking, there was a wide range of responses for how frequently parents drank, including daily, weekly, monthly, "sometimes," "on special occasions," "not often," and "barely."

Do you know of anyone who has been affected by alcohol? Could that happen to you?

All but two high school students said that they knew someone affected by alcohol. The proportion of middle school students who knew someone affected by alcohol was lower, at approximately two-thirds. Given that both parts of this survey item were yes/no questions, students did not consistently provide explanations of their answers. Of those respondents who said they did not think it could happen to them, most indicated that was because they do not drink alcohol.

Could alcohol hurt you now? How drinking now could impact your future?

Both high school and middle school students overwhelmingly said that alcohol could hurt them. The most common descriptions of how it could impact their future included impacting their grades, relationships, and driving, hurting their chances for college, and impairing their judgment. Other answers included hurting their reputation, addiction, sports, and hurting themselves or others.

What are your goals? How could alcohol keep you from reaching your goals?

Most responses indicated that students want to go to college and that alcohol could prevent that from happening. A few students listed career ambitions other than college. Answers as to how alcohol could prevent them from obtaining their goals included alcohol being a distraction, leading to poor judgment, and causing them not to care about their goals.

How much do your parents talk to you about drinking?

Among high school students, most indicated that their parents did not speak to them about alcohol, with half of those saying it was because their parents trusted them not to drink. Fewer said that their parents talk to them about it "sometimes" or "often." Roughly half of middle school students said their parents do talk to them about alcohol, and about half of those indicated they talk to them often.

Have your parents told you about their history with alcohol? What do you know?

Overall, approximately half of all students said their parents have told them about their history with alcohol. Of those, most said parents spoke of family problems with alcohol as a warning.

Do your parents know your friends? Do they know their parents? Do your parents know what your friends' parents think about drinking?

Most high school students and all but two middle school students said their parents knew their friends. Results were difficult to interpret for the other two questions in this survey item, as they were grouped together, and not all students answered all parts of the question.

Do your parents know the legal ramifications of underage drinking?

The vast majority of students answered yes.

Do you tell your parents where you are going when you go out?

The vast majority of students answered yes, although a few admitted to not telling their parents the truth.

How do you think you can make a difference?

Among both high school and middle school students, the most popular answers included informing/educating others, getting involved, avoiding peer pressure and not drinking/being a role model, and helping others.

Conclusions

Differences between Middle School and High School Students

Differences between high school students and middle school students on survey items were concentrated around the following issues: norms related to alcohol, the perceived availability of alcohol, and personal experience with alcohol. Most of these differences can be understood in terms of the age difference between middle and high school students. Questions about whether it is normal for youth to drink, and if respondents would wear a shirt advertising alcohol indicated a difference in the alcohol norms of each age group. Middle school students are less likely than high school students to perceive youth alcohol use as normative, and are also less likely to wear alcohol advertising on their clothes. Given that alcohol use rates are lower among middle school students than among high school students, as shown in the Arizona Youth Survey, it makes sense that middle school students are reporting less of a norm for alcohol use.

While most of the survey questions about youth access to alcohol indicated that students in both age groups perceived it as being easy to obtain, there were some differences between the two age groups on sub-questions. Middle school students were less likely than high school students to believe it was easy to get certain types of alcohol, less likely to know adults who might give them alcohol, and more likely to believe that their parents would know if alcohol was missing from their homes. Given the difference in age and maturity between middle and high school students, it is not surprising that alcohol would be somewhat more difficult for middle school students to obtain.

The question asking whether students knew anyone who had been affected by alcohol also yielded some differences in responses between middle and high school students. Middle school students were less likely to know of others who have been affected by alcohol, which is likely to be both a result of having less life experience, overall, and reflective of lower alcohol use patterns among middle school students as demonstrated in the Arizona Youth Survey.

Similarities among Middle School Students and High School Students

Overall, responses on the GLOW survey indicated a strong awareness among students of norms encouraging alcohol use among youth. This awareness was demonstrated through youth feedback regarding the influence of the media (music industry and television), cultural backgrounds, the availability of alcohol, and the impact alcohol has had on people in their lives. Despite this, most students who completed the GLOW survey indicated that they perceived alcohol use as a threat to their goals and their futures. With regard to parenting, students also reported that the majority of their parents have alcohol in their houses, and many youth believe that they could take alcohol from home without their parents' knowledge. Most students reported that their parents know their friends, know where they (teens) are going when they go out, and that they understand the legal ramifications about underage drinking, although a large proportion of students said that their parents do not talk to them about underage drinking.

A number of survey items could not be sufficiently and reliably analyzed, due to a lack of clarity in wording or multiple measures in a single question. Future data collection efforts should include a revision of the GLOW survey to address these issues.

Data Source 6

Arizona Youth Survey (AYS) 2006

Arizona Revised Statute §41-2416 requires the Arizona Criminal Justice Commission to conduct a statewide survey that is designed to measure the prevalence and frequency of substance abuse by youth, as well as their attitudes toward substance abuse. To comply with Arizona Revised Statute §41-2416 the Arizona Criminal Justice Commission's Statistical Analysis Center conducts a biennial Arizona Youth Survey (AYS).

Methods

This survey is administered to a statewide sample of 8th, 10th, and 12th grade students attending public and charter middle and high schools throughout Arizona. The Arizona Criminal Justice Commission has been conducting a youth survey for 15 years on a biennial basis. However, notable improvements in the survey model, sampling methods and the increasing levels of participation distinguish the 2002, 2004, and 2006 Arizona Youth Surveys from prior surveys. The 2006 Arizona Youth Survey was administered between January and April of 2006 in Arizona public and charter schools. This statewide effort encompassed all 15 counties and 362 schools, which resulted in the participation of 60,401 8th, 10th, and 12th grade students throughout Arizona (ACJC, 2006). The improvements made to the survey model during the 2002 administration were sustained during the 2004 and 2006 survey administrations. With the enhancements made in the survey methodology, the results from the 2002, 2004, and 2006 surveys are able to be displayed within this report, and comparisons between the three years can be made, as seen in Table 23 on page 46.

Results

Alcohol is still the most common substance used by Arizona middle and high school students. In the past month, 34.4% of students have used alcohol, and 61.7% of students have used alcohol in their lifetime. A comparison between the Arizona Youth Survey and the National Monitoring the Future (MTF) survey is another measure for assessing current substance abuse and risk behaviors of Arizona youth. Eighth grade alcohol, cigarette, and marijuana use rates were higher in Arizona than for 8th grade students in the national sample. Further, 10th grade alcohol, cigarette, heroin, and cocaine use rates were higher in Arizona than for the 10th grade national sample, and alcohol use for Arizona youth who took the survey was 9.4% greater for Arizona 8th graders (50.4% for Arizona 8th, compared to 41.0% for MTF 8th) and 4.4% greater for Arizona 10th graders (67.6% for Arizona 10th compared to 63.2% for MTF 10th).

Lifetime use of alcohol, cigarette, marijuana, and sedatives in all grades has significantly decreased since the 2004 survey. Alcohol use decreased 1.5% to 3.4% in each grade, however, a higher percentage of Arizona youth in the 8th grade have used alcohol, cigarettes, marijuana, inhalants, cocaine, ecstasy, heroin, and methamphetamines in the past 30 days than 8th graders in the national sample. For the 10th grade, a higher percentage of Arizona youth have used alcohol, cigarettes, marijuana, inhalants, hallucinogens, cocaine, heroin, and methamphetamines than 10th graders in the national sample. Since 2004, 30-day use rates have decreased in all grades for alcohol and sedatives; however, as the table on the following page illustrates, Arizona data for age of onset, 30-day use, perception of risk and access to alcohol is still present at alarming levels even considering some of the modest declines reported since 2002.

Review of Meta-Analysis Findings

The results of this meta-analysis show some clear trends in perception and prevalence that could be useful to the State's development of a unified underage drinking prevention media campaign. Recommendations based on these findings and offered earlier in this report are informed by the following trends and highlights from these results:

- While concerned about underage drinking, most parents employ a harm reduction approach regarding youth alcohol use rather than a zero tolerance approach. Messages of "don't drink and drive," and the belief that it is safe for youth to drink at home under adult supervision are prevalent among parents.
- Parent perceptions matched available data on youth self-reports regarding both the availability of alcohol and the reasons why teens drink. Alcohol is generally obtained by youth at home, or provided by an older friend, sibling, or relative. As for why teens drink, youth and parents agree that it is primarily because of peer pressure and stress.
- ➤ Overall, DUI arrest data supports the contention that arrests for underage drinking are only a small byproduct of DUI Task Force activities and, because of this, a different law enforcement approach may be necessary to impact the prevalence of underage drinking and underage youth who drink and drive.
- The 18-34 male demographic was less concerned about underage youth consuming alcohol. In addition, this demographic group seems to condone supplying alcohol to underage drinkers and do not appear to support more stringent policies or laws governing this behavior.
- ➤ Youth obtain and consume alcohol from their friends at parties, often older friends with easier access to alcohol. Given this information it seems that media and prevention efforts should target this 21 34 year old demographic as well as parents who allow their

- children to have unsupervised parties where alcohol is provided or where its use is acceptable.
- ➤ Middle school students were less likely than high school students to believe it was easy to get certain types of alcohol, less likely to know adults who might give them alcohol, and more likely to believe that their parents would know if alcohol was missing from their homes.
- Most students (middle and high school age) reported that their parents know their friends, know where they (teens) are going when they go out, and that they understand the legal ramifications about underage drinking, although a large proportion of students said that their parents do not talk to them about underage drinking.

Table 23: 2006 AYS Youth Perception and Prevalence of Alcohol Use (N = 60, 401)

			4				,									
				2006 AY	Z Pe	reent of	2006 AYS Percent of Youth -		Alcohol Usage by County	e by Cou	ınty					
	State	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma
8th Grade											•					
Ever use	50.9	40.8	48.2	50.9	63.7	49.2	65.5	53	49.1	64.1	49.7	50.7	57.9	53.3	51.8	52.9
30 day	24.1	17.9	21	26.7	34.3	25.7	37.6	28.5	23	34.6	26.6	24.2	30.3	28	24.2	24.5
Binge	13.7	13	10.4	17.4	19.3	18.8	25.3	15.7	12.3	21.3	15.7	14	16.9	22.7	11.9	13.1
Drunk/high school	13	27.9	8.6	18.6	20.6	10.9	18.3	16.2	11.7	16	21.6	15	19.4	11.1	11.3	10.7
Intent to use	48.2															
Percep risk	30.5															
Ease of	51.4															
10th Grade																
Ever use	9.79	57.3	73.6	71.4	70.2	63.6	69.5	66.2	64.7	75.5	61.8	73	72.8	78.6	7.77	99
30 day	39.2	30.7	39.7	37.9	48.1	38.2	48.1	37.1	36.4	46.2	33.7	43.3	44.1	49.7	49	41.5
Binge	22.4	18.9	19.1	24.7	31.9	26.9	34.1	22.7	20.3	28.5	22.4	22.1	24.8	30.9	31.2	26.6
Drunk/high school	21.1	32.3	22.2	29.3	30.1	27.6	31	19.3	18.6	23	32.4	23.2	33.5	15.5	27.7	17.6
Intent to use	60.1															
Percep risk	33.6															
Ease of	1															
access	70.5															
12th Grade																
Ever use	74.5	71.3	72.4	79.9	78.2	64.6	9.98	69.4	72.8	78.3	61.5	78.5	78.8	85.1	9.08	71.9
30 day	47	43.2	42.9	48.1	42.1	40.2	55.4	42.6	46	50.7	30.4	49.8	51.1	61.2	55	43.1
Binge	28.2	31.5	23.2	25	23.6	26.6	29.9	23.7	26.9	33.1	19.4	30	30.2	40.9	34.5	30.7
Drunk/high	21.4	38.7	308	7 00	20.1	25.4	373	717	20.1	22.3	25.1	1 12	32.1	18.4	25.4	14.1
1001136	1.17	7:00	0.01	11	1.01		j:	7.1.7	1.07		1.01	1.17	1.70			1.1.1
Intent to use	63.8															
Percep risk	36.6															
Ease of																
access	77.9															

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